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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/498,801	01/31/2000	Gary T. Boyd	55241USA9A	9317

7590 09/12/2002

Attention William D Miller
Office Of Intellectual Property Counsel
3M Innovative Properties Company
PO BOX 33427
St.Paul, MN 55133-3427

EXAMINER
SHAFER, RICKY D

ART UNIT	PAPER NUMBER
2872	

DATE MAILED: 09/12/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/498,801	Applicant(s) BOYD ET AL
	Examiner R.D. SHAFER	Group Art Unit 2872

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTHS MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

☒ Responsive to communication(s) filed on 6/13/02.

☒ This action is FINAL.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 1 1; 453 O.G. 213.

Disposition of Claims

☒ Claim(s) 1-9, 12-16 AND 36-38 is/are pending in the application.

Of the above claim(s) 36-38 is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-9 AND 12-16 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claim(s) _____ are subject to restriction or election requirement

Application Papers

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).

☐ All ☐ Some* ☐ None of the:

☐ Certified copies of the priority documents have been received.

☐ Certified copies of the priority documents have been received in Application No. _____.

☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

*Certified copies not received: _____.

Attachment(s)

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☒ Notice of Reference(s) Cited, PTO-892

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Interview Summary, PTO-413

☐ Notice of Informal Patent Application, PTO-152

☐ Other _____

Office Action Summary

1. Newly submitted claims 36-38 are directed to an invention that is independent or distinct from the elected invention for the following reasons. Newly submitted claims 36-38 are not drawn to the elected invention because the newly submitted claims fail to include the particular and/or specific details of the reflective polarizing film and adds separate details of the mounting arrangement of the first light source and the reflective image being coplanar or side by side. The newly submitted and elected inventions are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because of the omission of the particular and/or specific details of the reflective polarizing film, as evidenced by original and/or amended claim 1. The subcombination has separate utility such as an illuminated display device without the particular mounting arrangement of the first light source and the reflective image being coplanar or side by side which would required a search in class 345 subclass 8 which would not be required for the elected invention. Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 36-38 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Uchiyama et al ('032).

Uchiyama et al discloses an illuminated display device comprising a first light source (2) disposed on a mount (10) having a mounting surface and directing light along a first axis, a reflective image display unit [(6B) or (6R)] disposed on the mount surface with an optical axis substantially parallel to the first axis and a reflective polarizing film (4) disposed to direct light from the first light source to the reflective image display unit. Note Figures 2 and 16.

4. Claims 1 and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Schehrer et al ('508).

Schehrer et al discloses an illuminated display device comprising a first light source [(501), (510) or (533)] disposed on a mount (534) having a mounting surface and directing light along a first axis, a reflective image display (504) disposed on the mount surface with an optical axis substantially parallel to the first axis, a reflective polarizing film (505) and a reflector [(502), (512) (532)]. Note figures 1A, 7, 8 and 10a to 10d.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1, 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Handschy et al ('451).

Handschy et al discloses an illuminated display device comprising a first light source (34), a reflective image display (36), a reflective polarizing film (64) and a reflector (42), note Figure 2B, except for explicitly illustrating that the illuminated display device includes a mount having a mounting surface.

However, it would have been obvious and/or within the level of one of ordinary skill in the art at the time the invention was made that each of the elements of the illuminated display device of Handschy et al would include a supporting substrate and it would have been obvious to mount the elements on the same supporting substrate in order to maintain better optical alignment when said display device is mounted onto a helmet or a pair of glasses.

7. Claims 2-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uchiyama et al ('032).

Uchiyama et al discloses all of the subject matter claimed, note the above explanation, except for the reflective polarizing film being curved.

It is well known to provide a curved reflective polarizer in the same field of endeavor or analogous art for the purpose of reducing the bulk and weight of a display system or alternating provide for light concentration, uniform light transmission and/or aberration corrections.

Therefore, it would have been obvious and/or within the level of one of ordinary skilled in the art at the time the invention was made to modify the polarizing beam splitter of Uchiyama et al to include a curved reflective polarizer as is common used and employed in the optical art in order to increase light concentration, provide uniform light transmission or alternatively reduce optical aberrations, bulk and weight of the display system.

8. Claims 2-9 and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Handschy et al ('451) in view of Handschy et al ('800).

Handschy et al ('451) discloses all of the subject matter claimed, note the above explanation, except for the reflective polarizer being curved.

Handschy et al ('800) teaches it is known to provide a curved reflective polarizer in the same field or endeavor for the purpose of reducing the bulk and weight of a display system.

Therefore, it would have been obvious and/or within the level of one of ordinary skill in the art at the time the invention was made to modify the reflective polarizer (polarizing beam

splitting cube) of Handschy et al ('451) to include a curved reflective polarizer as taught by Handschy et al ('800) in order to reduce the bulk and weight of the display system.

9. Claims 2-9 and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schehrer et al ('508).

Schehrer et al discloses all of the subject matter claimed, note the above explanation, except for the reflective polarizing film being curved.

It is well known to provide a curved reflective polarizer in the same field of endeavor or analogous art for the purpose of reducing the bulk and weight of a display system or alternating provide for light concentration, uniform light transmission and/or aberration corrections.

Therefore, it would have been obvious and/or within the level of one of ordinary skilled in the art at the time the invention was made to modify the polarizing beam splitter of Schehrer et al to include a curved reflective polarizer as is common used and employed in the optical art in order to increase light concentration, provide uniform light transmission or alternatively reduce optical aberrations, bulk and weight of the display system.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication should be directed to R. D. Shafer at telephone number (703) 308-4813.

RDS

September 7, 2002

RICKY D. SHAFER
PATENT EXAMINER
ART UNIT 2872